

PATENT 10/043,939 Docket No. 495812001900

#### CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

Karen Foster

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Lisa DHAR and Mark David MICHAELS

Serial No.: 10/043,939

Filing Date: January 11, 2002

For:

METHOD AND APPARATUS FOR MULTILAYER OPTICAL ARTICLES

Examiner: To Be Assigned

Group Art Unit: 2872

#### PRELIMINARY AMENDMENT

Box Patent Application U.S. Patent and Trademark Office Washington D.C. 20231

Dear Sir:

Prior to examination on the merits, applicants respectfully request that the following amendment be entered.



#### **AMENDMENTS**

# In the Specification TRADE

On page 1, under METHOD AND APPARATUS FOR MULTILAYER OPTICAL ARTICLES, please insert the following paragraph:

#### -- CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/314,320, entitled "Optically Flat, Multilayer Articles" filed August 22, 2001 which is incorporated by reference herein in its entirety. --

On page 39, under ABSTRACT OF THE DISCLOSURE, please delete the existing paragraph and add the following paragraph:

The present invention provides a method and apparatus for a multilayer optical articles. A method comprises forming a first multilayer article with a first substrate and a second substrate with a first adherent disposed between the first and second substrate. A first surface of a third substrate is then grasped with a first holder and a second adherent is then disposed on one or more surfaces selected from a second surface of the third substrate and a surface of the first multilayer article while the multilayer article is grasped by a second holder. The second adherent is then at least partially cured while the first and second holders maintain their grasp and while the inner surfaces of the first and second holders are in the selected angular relationship to form a second multilayer article. --

## In the Drawings

Substitute drawings are submitted with this amendment.

#### **REMARKS**

Entry of the foregoing amendment is respectfully requested. The specification has been amended to provide cross-reference to a related patent application. The specification has been amended to provide an Abstract less than 150 words in length. Substitute drawings are submitted with this amendment that are in dark ink, not pencil.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. <u>495812001900</u>. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

Thomas Chuang Registration No. 44,616

Morrison & Foerster LLP 425 Market Street

San Francisco, CA 94105-2482 Telephone: (415) 268-6062 Facsimile: (415) 268-7522

## "Version with markings to show changes made"

#### In the Abstract

The present invention provides a method and apparatus for a multilayer optical articles. A method comprises grasping a first surface of a first substrate with a first holder, whereby the first surface of the first substrate is held to an inner surface of the first holder. A first surface of a second substrate is grasped with a second holder, whereby the first surface of the second substrate is held to an inner surface of the second holder. The inner surfaces of the first and second holders are arranged to face one another in a selected angular relationship. An adherent is disposed on one or more surfaces selected from a second surface of the first substrate and a second surface of the second substrate. The first adherent is at least partially cured while the first and second holders maintain their grasp and while the inner surfaces of the first and second holders are in a selected distance relationship and the selected angular relationship to form a first multilayer article. The first multilayer article is released from the first holder. The first surface of the third substrate is then grasped with the released first holder, whereby the first surface of the third substrate is held to an inner surface of the first holder. A second adherent is then disposed on one or more surfaces selected from a second surface of the third substrate and the reflective first surface of the first substrate of the formed first multilayer article. The second adherent is then at least partially cured while the first and second holders maintain their grasp and while the inner surfaces of the first and second holders are in the selected angular relationship to form a second multilayer article. After removal of the first and second holders the at least partially cured first and second adherent-maintains the second multilayer article in a posture at which the second multilayer article was held by the first and second holders, wherein the first and second adherent comprise a photopolymer such that the article is capable of storing data in a reflective holographic data storage system.

The present invention provides a method and apparatus for a multilayer optical articles.

A method comprises forming a first multilayer article with a first substrate and a second substrate with a first adherent disposed between the first and second substrate. A first surface of

Serial No. 10/043,939 Docket No. 495812001900 a third substrate is then grasped with a first holder and a second adherent is then disposed on one or more surfaces selected from a second surface of the third substrate and a surface of the first multilayer article while the multilayer article is grasped by a second holder. The second adherent is then at least partially cured while the first and second holders maintain their grasp and while the inner surfaces of the first and second holders are in the selected angular relationship to form a second multilayer article.